CLAIMS

1. A support structure for a castor comprising a first member, a second member that is rotatable with respect to the first member about a pivot axis, and magnetic means that is operable up to a certain torque to restrain movement of the rotatable member from one angular position with respect to the first member.

2. A support structure for a castor as claimed in claim 1 in which said one angular position corresponds to a desired registration of the first and second members.

3. A support structure for a castor as claimed in claim 1 or 2 in which in other angular positions the magnetic means is operable to permit free rotation unless and until re-registration occurs.

4. A support structure for a castor as claimed in claim 1, 2 or 3 in which the magnetic means is operable to bias the rotatable member into said one angular position when displaced therefrom.

5. A support structure for a castor as claimed in any one of the preceding claims in which the first and second members have co-axial spaced apart mutually facing surfaces.

6. A support structure for a castor as claimed in any one of the preceding claims in which the magnetic means comprises at least one magnet.

7. A support structure for a castor as claimed in any one of the preceding claims in which the magnetic means comprises a plurality of magnetically co-operable components at least one of which is associated with the first member and at least one of which is associated with the second member.

8. A support structure for a castor as claimed in any one of the preceding claims in which the magnetic means comprises at least one permanent magnet.

9. A support structure for a castor as claimed in any one of the preceding claims in which the magnetic means comprises at least one ferro-magnet.

10. A support structure for a castor as claimed in any one of the preceding claims in which the magnetic means comprises at least one pair of magnetically co-operable components.

11. A support structure for a castor as claimed in claim 10 in which said at least one pair of magnetically co-operable components are the aforesaid first and second members, separate components or at least one separate component.

12. A support structure for a castor as claimed in any one of claims 1 to 10 in which the magnetic means comprise two pairs of separate components and one component of at least one pair of magnetically co-operable components is mounted with respect to each of said first and second members.

13. A support structure for a castor as claimed in any one of claims 10, 11 or 12 in which a small air gap between the magnetically co-operable components creates a magnetic flux that provides said restraining effect.

14. A support structure for a castor, comprising:

(i) first and second plates located in co-axial, spaced apart relationship so as to provide mutually facing surfaces,

(ii) bearing means located between the plates whereby one plate is rotatable with respect to the other plate, and

(iii) one component of at least one pair of co-operable components being mounted on each plate, at least one of which pair of components is a permanent magnet adapted, in one angular position of the rotary plate with respect to the non-rotary plate, to be brought into registration with a relatively small air gap between adjacent surfaces of the two co-operable components to create a magnetic flux that, up to a certain torque restrains rotation, and in other angular positions without registration permits free rotation unless and until re-registration occurs.

15. A support structure for a castor as claimed in any one of the preceding claims in which one of the first and second members has an annular skirt or rim extending therefrom toward the other one of the members.

16. A support structure for a castor as claimed in claim 15 in the skirt encloses the magnetic means.

17. A support structure for a castor as claimed in any one of the preceding claims in which the magnetic means comprise at least one electro-magnet.

18. A support structure for a castor as claimed in claim 17 and further comprising means to selectively energize and de-energize the electro-magnet.

19. A support structure for a castor as claimed in claim 10 in which one component of said at least one the pair is a permanent magnet and the other component of the pair is a ferro-magnetic element.

20. A support structure for a castor as claimed in claim 10 in which both components of said at least one pair are permanent magnets.

21. A support structure for a castor as claimed in any one of claims 6 to 20 in which discs are used for the magnets.

22. A support structure for a castor as claimed in any one of claims 6 to 20 in which the magnets are arcuate.

23. A support structure for a castor as claimed in any one of claims 10 to 22 in which a plurality of pairs of magnetically co-operable components are used and disposed at spaced positions on a common pitch circle diameter.

24. A support structure for a castor as claimed in claim 23 in which two pairs of magnetically co-operable components are used that are located 180° apart.

25. A support structure for a castor as claimed in any one of claims 10 to 24 in which the pairs of magnetically co-operable components are disposed to have confronting faces that are slightly spaced apart to define an air gap therebetween.

26. A support structure for a castor as claimed in claim 25 in which means is provided to adjust the spacing between confronting faces of the magnetically co-operable components

27. A castor suitable for a manually movable trolley and comprising a support structure according to anyone of claims 1 to 26.

28. A castor as claimed in claim 27 and comprising a wheel, roller or other ground engaging rolling element that is mounted rotatably with respect to a support bracket.

29. A castor as claimed in claim 27 or 28 in which the support bracket constitutes or forms part of the aforesaid second (rotatable) member.

30. A trolley provided with at least one castor as claimed in any one of claims 27 to 29.

31. A trolley as claimed in claim 30 when provided with four castors.

32. A trolley as claimed in claims 30 or 31 when manually movable.

33. A support structure for a castor constructed and arranged substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings of figures 1 and 2 or 3 to 6.

34. A castor constructed and arranged substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings of figures 1 and 2 or 3 to 6.

35. A trolley constructed and arranged substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings of figure 8.